

## **XcmsAllocColor, XcmsAllocNamedColor – allocate colors**

Status **XcmsAllocColor**(*display, colormap, color\_in\_out, result\_format*)

```
Display *display;  
Colormap colormap;  
XcmsColor *color_in_out;  
XcmsColorFormat result_format;
```

Status **XcmsAllocNamedColor**(*display, colormap, color\_string, color\_screen\_return, color\_exact\_return, result\_format*)

```
Display *display;  
Colormap colormap;  
char *color_string;  
XcmsColor *color_screen_return;  
XcmsColor *color_exact_return;  
XcmsColorFormat result_format;
```

*display* Specifies the connection to the X server.

*colormap* Specifies the colormap.

*color\_exact\_return* Returns the color specification parsed from the color string or parsed from the corresponding string found in a color-name database.

*color\_in\_out* Specifies the color to allocate and returns the pixel and color that is actually used in the colormap.

*color\_screen\_return* Returns the pixel value of the color cell and color specification that actually is stored for that cell.

*color\_string* Specifies the color string whose color definition structure is to be returned.

*result\_format* Specifies the color format for the returned color specification.

The **XcmsAllocColor** function is similar to **XAllocColor** except the color can be specified in any format. The **XcmsAllocColor** function ultimately calls **XAllocColor** to allocate a read-only color cell (colormap entry) with the specified color. **XcmsAllocColor** first converts the color specified to an RGB value and then passes this to **XAllocColor**. **XcmsAllocColor** returns the pixel value of the color cell and the color specification actually allocated. This returned color specification is the result of converting the RGB value returned by **XAllocColor** into the format specified with the *result\_format* argument. If there is no interest in a returned color specification, unnecessary computation can be bypassed if *result\_format* is set to **XcmsRGBFormat**. The corresponding colormap cell is read-only. If this routine returns **XcmsFailure**, the *color\_in\_out* color specification is left unchanged.

**XcmsAllocColor** can generate a **BadColor** errors.

The **XcmsAllocNamedColor** function is similar to **XAllocNamedColor** except that the color returned can be in any format specified. This function ultimately calls **XAllocColor** to allocate a read-only color cell with the color specified by a color string. The color string is parsed into an **XcmsColor** structure (see **XcmsLookupColor**), converted to an RGB value, and finally passed to **XAllocColor**. If the color name is not in the Host Portable Character Encoding, the result is implementation-dependent. Use of uppercase or lowercase does not matter.

This function returns both the color specification as a result of parsing (exact specification) and the actual color specification stored (screen specification). This screen specification is the result of converting the RGB value returned by **XAllocColor** into the format specified in *result\_format*. If there is no interest in a returned color specification, unnecessary computation can be bypassed if *result\_format* is set to **XcmsRGBFormat**. If *color\_screen\_return* and *color\_exact\_return* point to the same structure, the pixel field will be set correctly, but the color values are undefined.

**XcmsAllocNamedColor** can generate a **BadColor** errors.

**BadColor** A value for a Colormap argument does not name a defined Colormap.

**XcmsQueryColor(3X11), XcmsStoreColor(3X11)**

*Xlib – C Language X Interface*